

# Comparative Agility

How Agile Are You?

How Agile Is the Industry?

Kenny Rubin

Agile Development Practices East 2010

November 17, 2010

## Background of Kenny Rubin

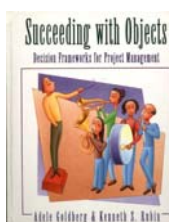


1 of about 120  
world-wide



Former  
Managing  
Director

Author of:



- Trained more than 15,000 people in Agile/Scrum, Smalltalk and PM
- Provide Agile/Scrum coaching to developers and executives

Available in Q2 2011





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## Agenda

- Motivation
- The Assessment Framework
- Assessment Process
- Preliminary Industry Results
  - Exercise
- Sample Company Results
  - Exercise
- Future of CA

## Scenario

- ▶ Our company has decided to use agile
- ▶ We get training and maybe some coaching
- ▶ After six months, management wants to know:
  - ▶ “How are we doing at adopting agile?”



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## Some specific questions

- ▶ Are we where we should be?
- ▶ In which areas do we need to improve?
- ▶ In which areas are we excelling?
- ▶ How are we doing relative to others?
- ▶ How are we doing relative to our competitors?



## We need an assessment framework

- ▶ An instrument for “measuring” agility
- ▶ Desirable attributes
  - ▶ Must evaluate multiple dimensions of agility
  - ▶ Must lead to actionable recommendations



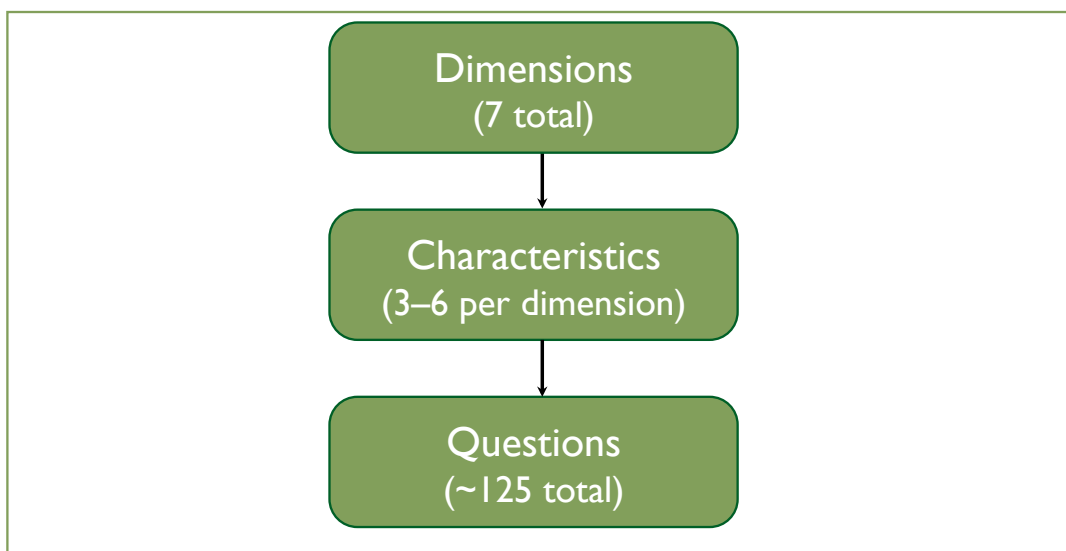


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## Assessment framework



# Seven assessment dimensions

- ▶ Teamwork
- ▶ Requirements
- ▶ Planning
- ▶ Technical practices
- ▶ Quality
- ▶ Culture
- ▶ Knowledge creation



## An Example

All-encompassing, task-oriented plans created upfront; reluctance to update plans; little buy-in to dates from team

### Planning (dimension)

Created at multiple levels of detail; frequently updated; created by team with full buy-in

#### Characteristics

Planning level  
Critical variables  
Progress tracking  
Source When Spread  
All upfront

#### Questions

- We do the right amount of upfront planning; helpful without being excessive.
- Effort spent on planning is spread approximately evenly throughout the project.

#### Responses

- True
- More true than false
- Neither true nor false
- More false than true
- False



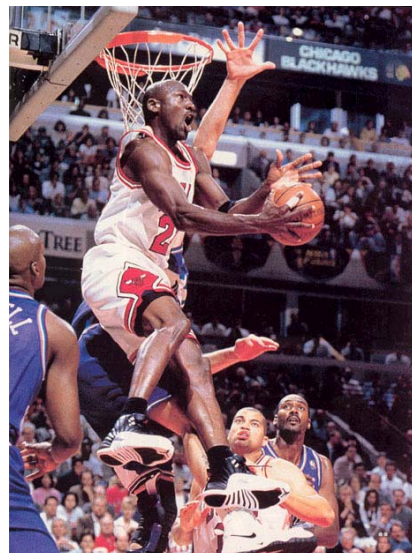
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NEW INNOVATION IDEAS

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## Assessment philosophy

- ▶ Not trying to determine maturity levels
- ▶ Organizations do not need to be perfect
  - ▶ Only better than their competitors
- ▶ Lead to the idea of a Comparative Agility Assessment
  - ▶ “How am I doing compared to my competition?”



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NEW INNOVATION IDEAS



# Assessment approaches

- ▶ Consultative
  - ▶ Administered to a team of people by a consultant
  - ▶ Consultant fills in the questionnaire based on responses collected during interviews
- ▶ Self-administered
  - ▶ Individuals working on projects complete survey
- ▶ Survey found at:
  - ▶ [www.ComparativeAgility.com](http://www.ComparativeAgility.com)



The screenshot shows the "Take the Survey" page of the Comparative Agility website. The page has a navigation bar with links: Home, Overview, Survey (active), Partners, and Case Studies. The main content area is titled "Teamwork Questions" and "Teamwork Composition". It displays a table of six statements with response options: True, More True than False, Neither True nor False, More False than True, False, and Not Applicable. The progress bar indicates 11% completion. A sidebar on the right lists survey sections: Demographics (checked), Teamwork (active), Requirements, Planning, Technical Practices, Quality, Culture, and Knowledge Creating. A "Next Questions" button is at the bottom.

	True	More True than False	Neither True nor False	More False than True	False	Not Applicable
Everyone required to go from requirements to potentially shippable product is on the team.	<input checked="" type="checkbox"/>					
Specialists are willing to work outside their specialties to achieve team goals.		<input checked="" type="checkbox"/>				
Teams have 5-9 people on them.		<input checked="" type="checkbox"/>				
People are not on more than 2 teams					<input checked="" type="checkbox"/>	
Testers and programmers are on the same team.	<input checked="" type="checkbox"/>					
Team members are kept together as long as possible.				<input checked="" type="checkbox"/>		

Sample from online survey



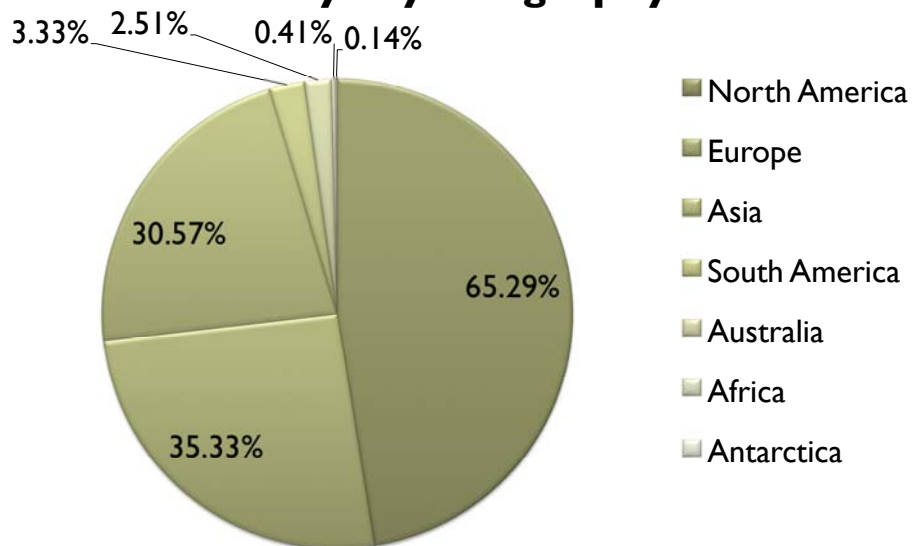


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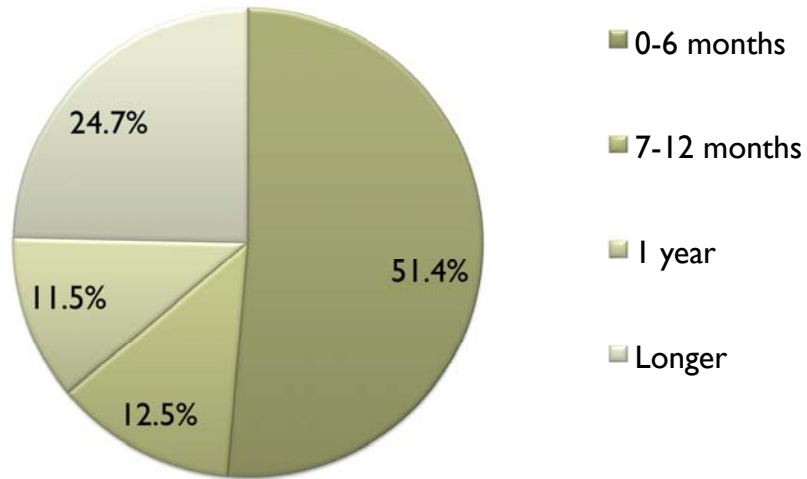
### Surveys by Geography



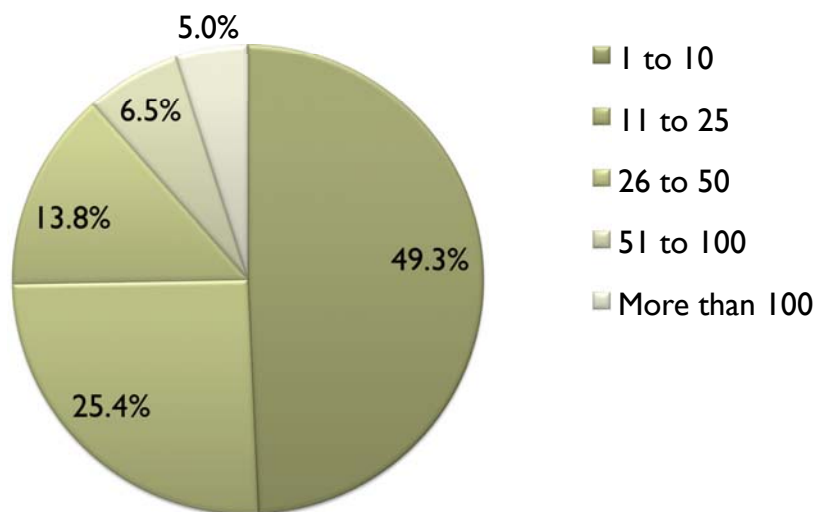
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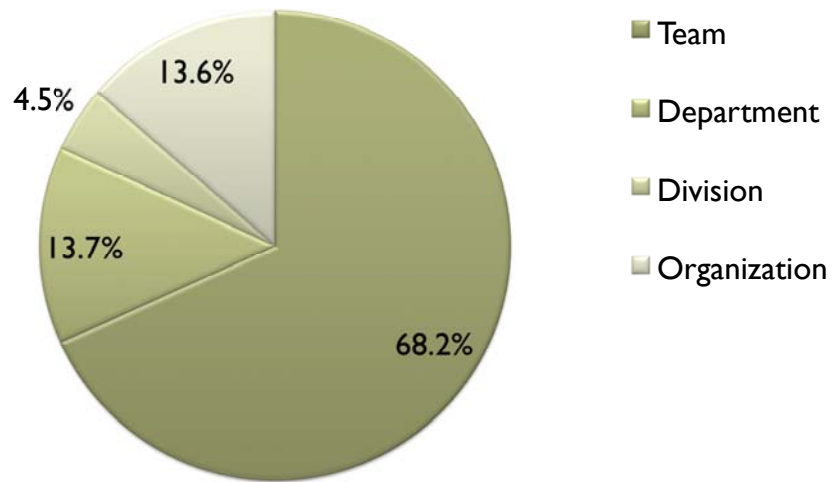
## Agile Experience of Respondents



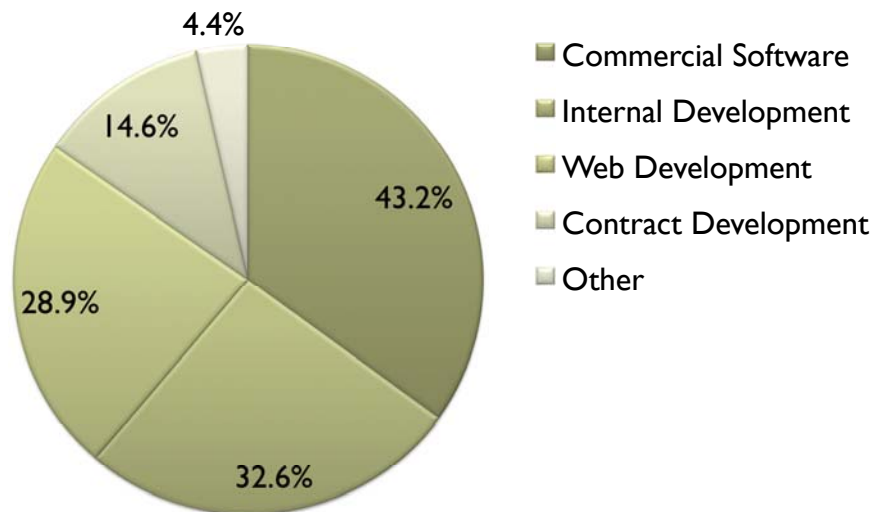
## Number of People on Project



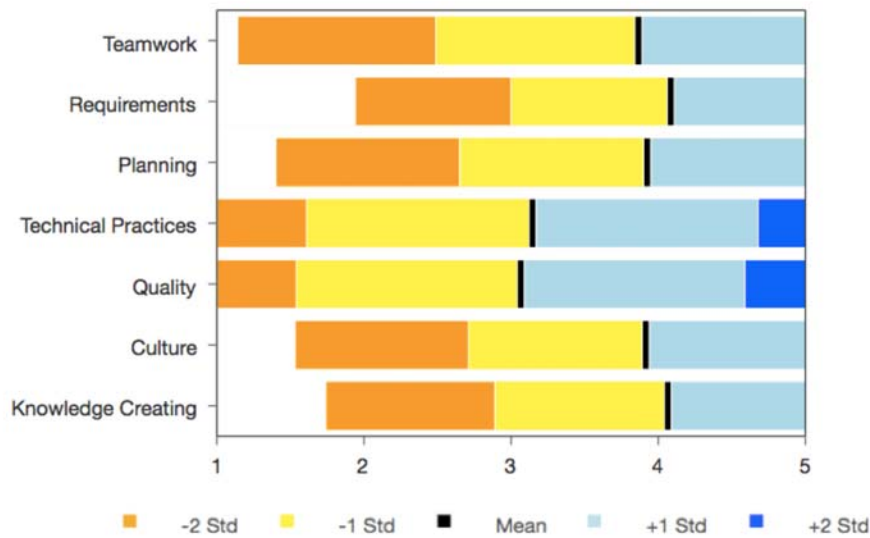
## Scope of the Survey Response



## Scope of the Survey Response



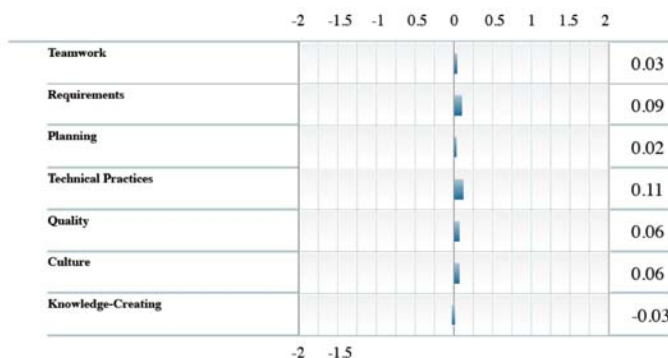
# Seven Dimensions



## Industry Data – (481 Surveys) Agile Web Development

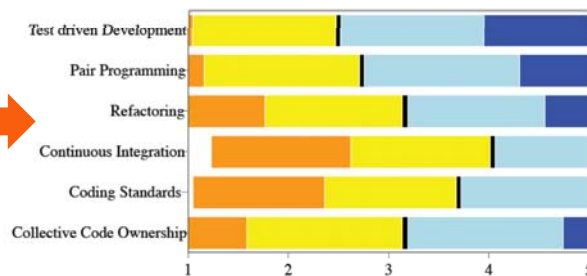
- Much more likely to have co-located teams (+0.28 std dev)
- Less likely to do planning (-0.11 std dev)
- Technical Practices
  - More likely to do:
    - Pair programming (+0.1 std dev)
    - Continuous integration (+0.11 std dev)
    - Collective Code Ownership (+0.1 std dev)
  - Less likely to have:
    - Coding standards (-0.1 std dev)
  - Less likely to take time to reflect (-0.2 std dev)

## Industry Data – (339 Surveys) Using Agile for > 2 year

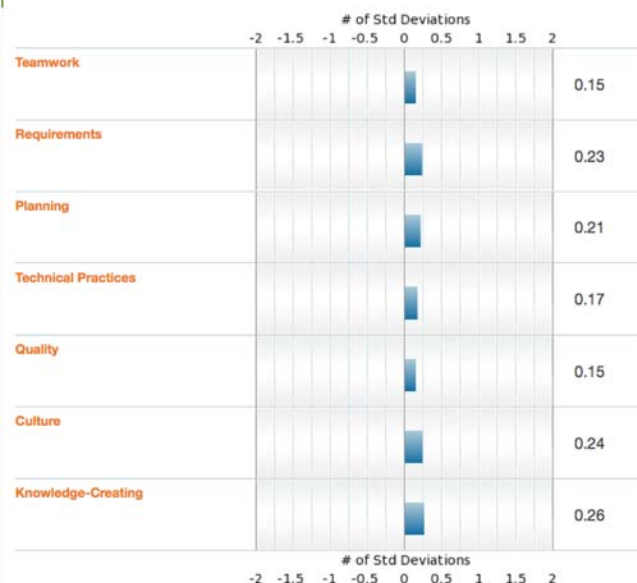


Only dimension less than the mean:  
Knowledge Creating  
(-0.03 std dev)

Although the technical practices are better than the database as a whole, many characteristics are still low? What does that mean?



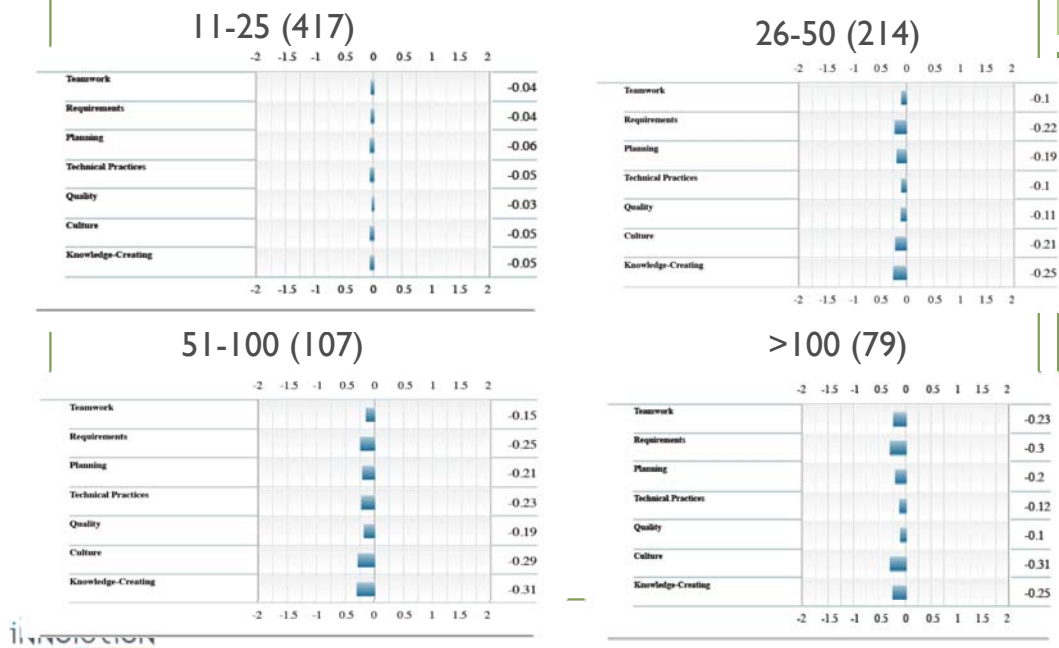
## Industry Data – (837 surveys) Teams of Size 1-10



Are you surprised by this result or does it confirm what you already knew?

Only two characteristics within 0.02 std dev of the mean. Any guesses in which dimension?

## Industry Data – Large Team Sizes



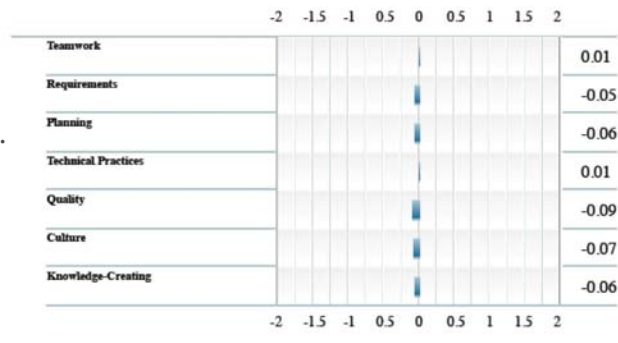
## Industry Data – Large Team Sizes (Continued)

Characteristic	11-25	26-50	51-100	> 100
Continuous Integration	0.01	0.06		0.07
Automated Unit Testing	0.06	0.03		
Customer Acceptance Tests	0.04			
Collective Code Ownership	0.05			
Team member Location			0.05	

All numbers are +std dev from the mean

# Industry Data – Geographic Differences

Europe (588 surveys) was negative on all dimensions. Are Europeans more self critical?



South America (52 surveys) was also negative on all dimensions & very negative on two technical practices: TTD (-0.43 std dev) & Automated Unit Testing (-0.41 std dev)

North America (1013 surveys) only negative was -0.31 std dev for Team Member Location



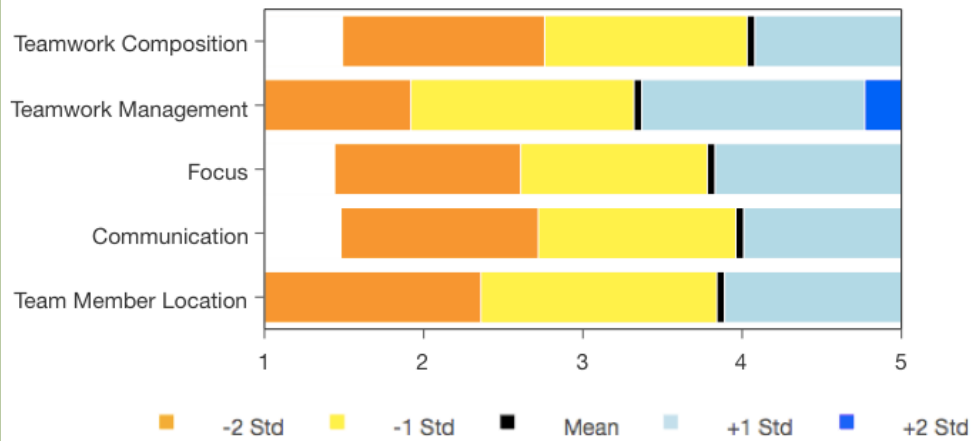
## Exercise

- Rationalize industry trends
  - Why are some aspects of agile more easily and/or readily accepted than others?
  - What aspects of agile should we focus on, as an industry, to improve results?

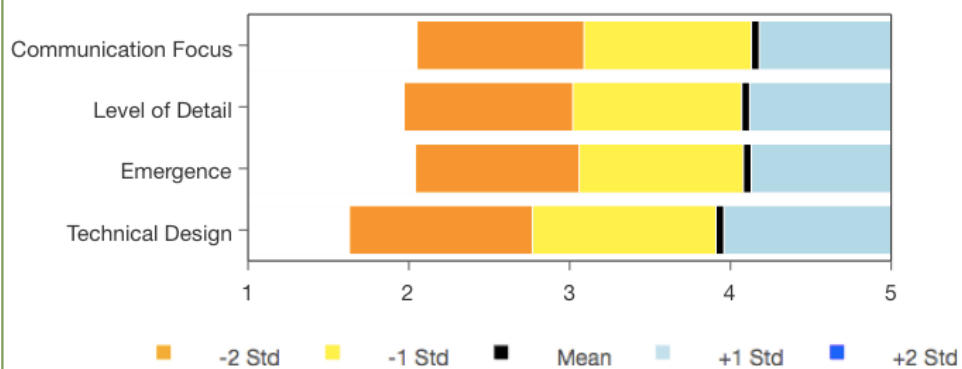




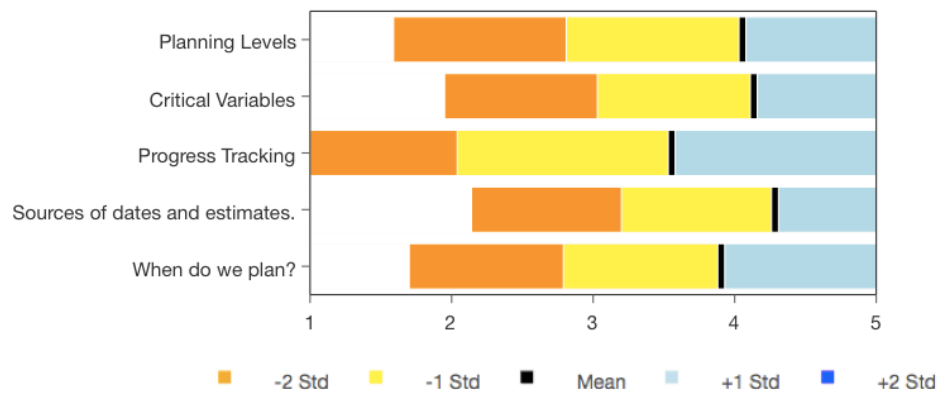
# Teamwork



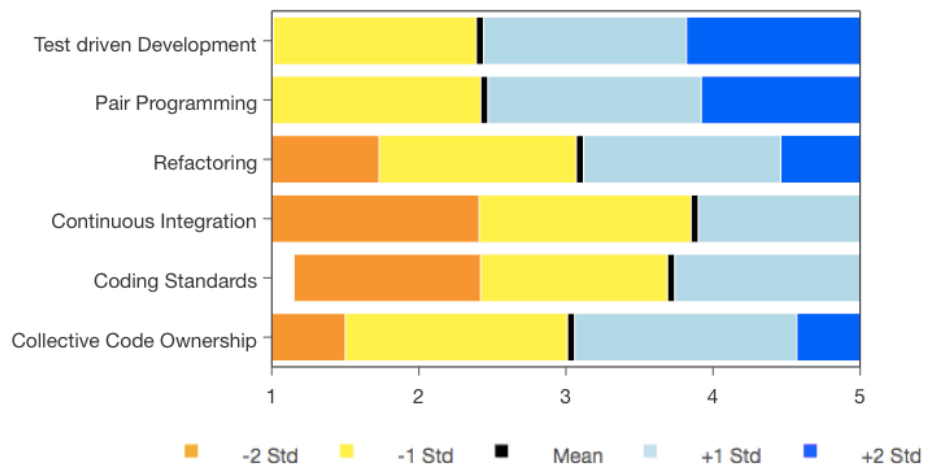
# Requirements



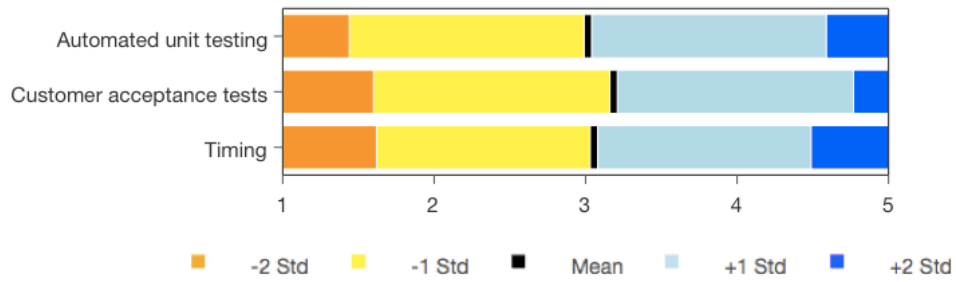
# Planning



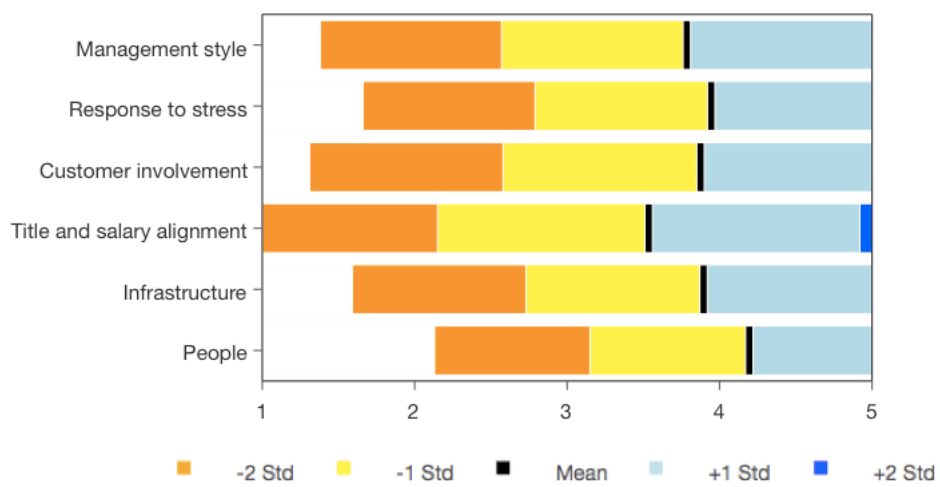
# Technical Practices



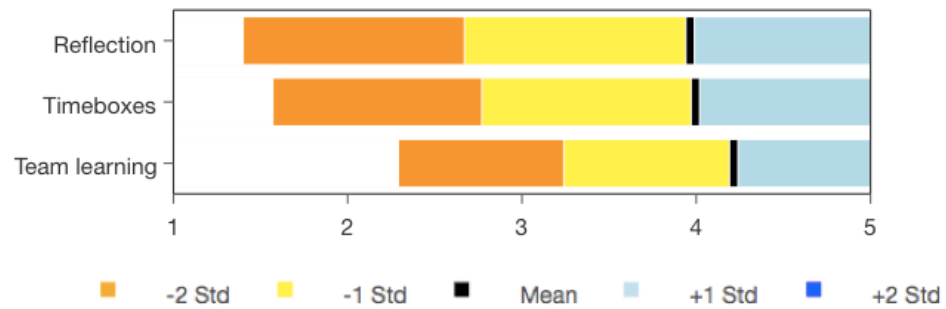
# Quality



# Culture



# Knowledge Creation



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# How does a company use this data?

- ▶ Stock their improvement backlog with items for teams (including non-delivery teams) to work on
- ▶ Identify Big Hairy Audacious Goals (BHAGs) to ask teams to meet
  - ▶ Identify leading and lagging indicators of success to gauge and measure progress



## Exercise

- ▶ Analyze results in the exercise handout
- ▶ Create an improvement backlog with items for this team





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## Future of CA

- ▶ Comparative Agility II
  - ▶ Revised to be balanced and consistent with industry agile trends
  - ▶ Statistical examination of questions to determine correlations and remove statistically unnecessary questions
- ▶ Revision process (Laurie Williams, Kenny Rubin, Mike Cohn)
  - ▶ Map Comparative Agility I questions to agile principles and practices
  - ▶ SurveyMonkey survey
    - ▶ “After all these years, what does it mean to be agile?”
    - ▶ Establish industry acceptance of Agile Principles and practices
  - ▶ Balance quantity of questions related to principles and practices
    - ▶ Elimination, revision and addition of questions

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## How you can participate



- Visit the website for details:
  - [www.ComparativeAgility.com](http://www.ComparativeAgility.com)
- Take the survey, its free!
  - Immediately get a report summarizing your answers
- If you want to take it as a team, request a special “collector”
- Community feedback process for Comparative Agility II  
[feedback.comparativeagility.com](http://feedback.comparativeagility.com)

## Contact Info for Kenny Rubin



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Twitter:	<a href="http://www.twitter.com/krubinagile">www.twitter.com/krubinagile</a>
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Scrum: A Manager's Guide Book Chapters	<a href="http://tinyurl.com/yj4m72c">tinyurl.com/yj4m72c</a>
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Comparative Agility Website	<a href="http://www.comparativeagility.com">www.comparativeagility.com</a>
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